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EXAMINER

MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 05/20/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/726,401

Applicant(s)

LEE ET AL.

Examiner

Tony Mahmoudi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- DP  
5/16/03
- 1) ☒ Responsive to communication(s) filed on 3/4/03.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 10-11, 13, 20, and 23-26 is/are rejected.
- 7) ☒ Claim(s) 7, 9, 12, 14-19, 21-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Remarks*

1. In response to communications filed on 04-March-2003, claims 1-4, 7, 9, 11, and 13 are amended, and new claims 14-26 are added per applicant's request. Therefore, claims 1-26 are pending in the application.
2. The allowance of claims 11-13, as indicated in the first office action is hereby withdrawn by the examiner in view of applicants' amendments made to claims 11 and 13.

### *Claim Objections*

3. Claims 11-13 and 22 are objected to because of the following informalities:

The preamble of claims 11 and 13 end with "based on the following way that:". The preambles should end with "comprising:", "based on:", or "consisting of:". Correction is required.

In claim 22, line 4: "influences to the reliability" should be --influences the reliability--.  
Also, in claim 22, lines 6-7: "update is in proportional" should be --update is proportional--.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as being a single means claim.

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor. See MPEP 2164.08(a).

Claims 14-15 are rejected under 35 U.S.C. 112, first paragraph, because they are dependents from the rejected independent claim 13.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 11-15, 19, and 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 11 and 13, the term "learning rate of the weights" is a relative term which renders the claim indefinite. The term "learning rate of the weights" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph because it is dependent from rejected independent claim 11.

Claims 14 and 15 recite the limitation "the previous feature weights" in line 2, and recite the limitation "the feedbacks from the user" in lines 3-4 and 20, and recite the limitation "the feedback" in line 5. There is insufficient antecedent basis for these limitations in the claim.

Claims 14-15 are further rejected under 35 U.S.C. 112, second paragraph because they are dependent from rejected independent claim 13.

Claim 19 recites the limitation "the present and previous retrieval performance" in lines 4-5, and recites the limitation "the number of feedbacks" in line 5. There is insufficient antecedent basis for these limitations in the claim.

Claim 21 recites the limitation “the present retrieval performance” in lines 4-5, and recites the limitation “the previous retrieval performance” in line 5, and recites the limitation “the number of feedbacks” in line 5. There is insufficient antecedent basis for these limitations in the claim.

Claim 22 recites the limitation “the present retrieval performance” in line 8, and recites the limitation “the previous retrieval performance” in lines 8-9. There is insufficient antecedent basis for these limitations in the claim.

*Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 3-4, 8, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wactlar et al (U.S. Patent No. 5,835,667) in view of Vaithilingam et al (U.S. Patent No. 6,411,724.)

As to claim 1, Wactlar et al teaches a Method for updating multimedia feature information in a multimedia retrieval system (see Abstract), comprising:

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(a) evaluating a retrieval performance using multimedia feature information (see column 10, lines 23-32);

(b) detecting change of retrieval environment based on the retrieval performance evaluation (see column 11, line 66 through column 12, line 5, where “detecting change of retrieval environment” is read on “detect big image changes”); and

(c) updating the reliability by reflecting the retrieval performance evaluation and the retrieval environment change (see column 12, lines 47-51.)

Wactlar et al does not teach using weight of multimedia features and reliability of the weight and does not teach updating the weight of the multimedia feature information.

Vaithilingam et al teaches using meta-descriptors to represent multimedia information (see Abstract), in which he teaches using weight of multimedia features and reliability of the weight (see column 6, lines 37-46); and updating the weight of the multimedia feature information (see column 9, lines 56-65.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Wactlar et al to include using weight of multimedia features and reliability of the weight; and updating the weight of the multimedia feature information.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Wactlar et al by the teaching of Vaithilingam et al, because by using weight of multimedia features and reliability of the weight; and updating the weight of the multimedia feature information, the system is enabled to set various characteristics to a multimedia file (data) and be able to adjust such characteristics in order to

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improve the quality and performance of the multimedia file, and further be able to measure the performances of “before” and “after” modifying such characteristics.

As to claim 3, Wactlar et al as modified teaches wherein updating reliability of the weight is proportionally influenced by the retrieval performance (see Vaithilingam et al, column 9, lines 56-60, where “retrieval performance” is read on “human expert’s input”).

As to claim 4, Wactlar et al as modified teaches wherein updating reliability of the weight is proportionally influenced by improvement of the retrieval performances (see Vaithilingam et al, column 2, lines 13-15.)

As to claim 8, Wactlar et al as modified teaches wherein a reliability update is proportionally influenced by a ratio of the present retrieval performance to the previous retrieval performance (see Wactlar et al, column 12, lines 45-52. It is inherent in a system which updates the performance of the multimedia files with feedback received from users, that the actual update value is the difference between the previous performance and the present performance, hence, the update is directly proportional (proportionally influenced) by a ratio (percentage) of the present retrieval performance to the previous retrieval performance.)



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As to claim 20, Wactlar et al as modified teaches wherein the retrieval performance is evaluated using the multimedia feature information for at least one multimedia item returned by a query of searchable multimedia items (see Wactlar et al, column 10, lines 23-32.)

10. Claims 2, 10, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaithilingam et al (U.S. Patent No. 6,411,724) in view of Aggarwal et al (U.S. Patent No. 6,408,293.)

As to claim 2, Vaithilingam et al teaches a method for updating multimedia feature information in a multimedia retrieval system using weight of multimedia features and reliability of the weight (see Abstract), comprising:

retrieving multimedia (see column 2, lines 13-15) using previous weight (see column 5, lines 22-39);

calculating retrieval performance with respect to the results of present retrieval (see column 5, lines 40-54, where “performance” is read on “how clearly defined and compact the clusters are”);

updating the reliability of the present weight by reflecting the calculated retrieval performance (see column 9, lines 56-65); and

updating the present weight using the updated reliability (see column 14, lines 64-67.)

Vaithilingam et al does not teach: receiving one or more user feedbacks with respect to results of the multimedia retrieval; and calculating retrieval performance using the one or more user feedbacks; and updating a present weight using the one or more user feedbacks;

Aggarwal et al teaches an interactive framework for understanding user's perception of multimedia data (see Abstract), in which he teaches receiving one or more user feedbacks with respect to results of the multimedia retrieval (see column 3, lines 38-56); calculating retrieval performance using the one or more user feedbacks (see column 5, lines 10-15); and updating a present weight using the one or more user feedbacks (see column 5, lines 3-15, where it is taught how the user's feedback is used to adjust the measures.);

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vaithilingam et al to include receiving one or more user feedbacks with respect to results of the multimedia retrieval; calculating retrieval performance using the one or more user feedbacks; and updating a present weight using the one or more user feedbacks.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vaithilingam et al by the teaching of Aggarwal et al, because receiving one or more user feedbacks with respect to results of the multimedia retrieval; calculating retrieval performance using the one or more user feedbacks; and updating a present weight using the one or more user feedbacks, would enable the system to continuously improve the quality and performance of multimedia files by presenting the files to the users, obtaining users' feedback on the files, and adjusting the features of the files based on feedback received from users.

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As to claim 10, Vaithilingam et al teaches a multimedia data structure for a multimedia retrieval using weight of the multimedia feature and reliability of the multimedia feature (see column 2, line 65 through column 3, line 5), comprising:

a reliability of present weight updated by reflecting retrieval performance (see column 9, lines 56-65, where “updating weights” is read on “updating the meta-descriptors”);

a present weight updated using the updated reliability (see column 14, lines 64-67.)

Vaithilingam et al does not teach the performance calculated using one or more user's feedbacks with respect to a to multimedia retrieval result obtained using previous weight.

Aggarwal et al teaches an interactive framework for understanding user's perception of multimedia data (see Abstract), in which he teaches the performance calculated using one or more user's feedbacks with respect to a to multimedia retrieval result obtained using previous weight (see column 2, lines 11-17, and see column 5, lines 3-15, where it is taught how the user's feedback is used to adjust the measures.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vaithilingam et al to include the performance calculated using one or more user's feedbacks with respect to a to multimedia retrieval result obtained using previous weight.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vaithilingam et al by the teaching of Aggarwal et al, because having the performance calculated using one or more user's feedbacks with respect to a to multimedia retrieval result obtained using previous weight would enable the system

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where users would customize the properties of the multimedia contents based on their input and preferences.

As to claim 23, Vaithilingam et al as modified teaches wherein the results of the multimedia retrieval is a set of multimedia objects, and wherein the calculated retrieval performance is based on a plurality of multimedia objects in the set (see Agrawal et al, column 1, line 66 through column 2, line 17.)

As to claim 24, Vaithilingam et al as modified teaches wherein the one or more user feedbacks independently update the present weight and the reliability of the present weight (see Agrawal et al, column 2, lines 11-40.)

As to claim 25, Vaithilingam et al as modified teaches wherein the retrieving multimedia using previous weight comprises querying a searchable set including multimedia data using the previous weight (see Vaithilingam et al, column 5, lines 32-39.)

As to claim 26, Vaithilingam et al as modified teaches wherein the present weight is updated using the one or more user feedbacks (see Agrawal et al, column 2, lines 11-40.)

11. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wactlar et al (U.S. Patent No. 5,835,667) in view of Vaithilingam et al (U.S. Patent No. 6,411,724) as

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applied to claims 1, 3-4, 8, and 20 above, and further in view of Aggarwal et al (U.S. Patent No. 6,408,293.)

As to claim 5, Wactlar et al as modified teaches a reliability update rate (see Wactlar et al, column 12, lines 45-52.)

Wactlar et al as modified does not teach wherein the update rate is proportionally influenced by number of feedbacks participated in calculation of s the retrieval performance.

Aggarwal et al teaches an interactive framework for understanding user's perception of multimedia data (see Abstract), in which he teaches wherein the update rate is proportionally influenced by number of feedbacks participated in calculation of s the retrieval performance (see column 5, lines 3-15, where it is taught how the user's feedback is used to adjust the measures.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Wactlar et al as modified to include the update rate being proportionally influenced by number of feedbacks participated in calculation of s the retrieval performance.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Wactlar et al as modified, by the teaching of Aggarwal et al, because having the update rate being proportionally influenced by number of feedbacks participated in calculation of s the retrieval performance, would enable the system where users would customize the properties of the multimedia contents based on their input and preferences.

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As to claim 6, Wactlar et al as modified teaches the reliability update (see Wactlar et al, column 12, lines 45-52.)

Wactlar et al as modified does not teach wherein the update is proportionally influenced by the difference between the present and previous retrieval performances.

Aggarwal et al teaches an interactive framework for understanding user's perception of multimedia data (see Abstract), in which he teaches wherein the update is proportionally influenced by the difference between the present and previous retrieval performances (see column 2, lines 11-17.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Wactlar et al as modified to include the update being proportionally influenced by the difference between the present and previous retrieval performances.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Wactlar et al as modified, by the teaching of Aggarwal et al, because having the update being proportionally influenced by the difference between the present and previous retrieval performances, would enable the system where users would customize the properties of the multimedia contents based on their input and preferences by calculating the difference between the previous feedback and the most recent feedback received by the user.

*Allowable Subject Matter*

12. Claims 7, 9, 12, 14-19, 21-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the reliability is calculated by a following formula:

previous reliability  $\times$  (1 + reliability increment) +  $\alpha$

wherein,

reliability increment: a function that multiplies the difference between the present and previous retrieval performance with the number of feedbacks.

$\alpha$  : constant for making the reliability value proportional to the number of feedbacks in same condition, as claimed in claim 7.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose,

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teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the reliability is calculated by a following formula:

previous reliability  $\times$  (1 + reliability increment) +  $\alpha$

wherein,

reliability increment: a function that multiplies the rate of the present retrieval performance to the previous retrieval performance with the number of feedbacks.

$\alpha$  : constant for making the reliability value proportional to the number of s feedbacks in same condition, as claimed in claim 9.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the weight is updated according to the following formula:

$$[\text{Reliability} \times \text{Old\_W} + \text{Cur\_W}] / [\text{Reliability} + 1]$$

wherein,  $0 < a < 1$ , and exponential term "a" in the formula for weights of feature is less than exponential term "a" in the formula for weights of elements of a feature, as claimed in claim 12.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose,



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teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the weight is updated based on the following:

(b) the more times the previous feature weights are learned with the feedbacks from the user, the less the feature weights are influenced by new feedback; and

(c) the more recent the feedback is, the more the feedback influence to the feature weights update, as claimed in claim 14.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the learning rate is in relation to the reliability formula,

$$[\text{Reliability} \times \text{Old } -W + \text{Cur-}V] / [\text{Reliability} + 1]$$

wherein,  $0 < a < 1$ , and exponential term "a" in the formula for weights of features is less than exponential term "a" in the formula for weights of elements of a feature, as claimed in claim 15.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

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wherein the weight is updated based on the following:

- (b) the more times the previous feature weights are learned with the feedbacks from the user, the less the feature weights are influenced by new feedback; and
- (c) the more recent the feedback is, the more the feedback influence to the feature weights update, as claimed in claim 16.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the updating the weight of the multimedia feature information comprises:  
updating the weights among the multimedia feature information; and  
updating weights among elements in a multimedia feature, wherein the multimedia weights learned with frequent feedbacks are relatively less influenced by a new feedback, and wherein recent feedback influences the multimedia weights relatively more than less recent feedback, as claimed by claim 17.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

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wherein the updating the weight of the multimedia feature information comprises determining a weight-learning rate among the multimedia features that is relatively higher than a weight learning rate among elements of a multimedia feature, as claimed in claim 18.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the reliability is calculated by a formula:

$$\text{previous reliability} \times (1 + \text{reliability increment})$$
 wherein, reliability increment: a function that multiplies the difference between the present and previous retrieval performance with the number of feedbacks, as claimed in claim 19.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the reliability is calculated by a formula:

$$\text{previous reliability} \times (1 + \text{reliability increment})$$

wherein,

reliability increment: a function that multiplies the rate of the present retrieval

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performance to the previous retrieval performance with the number of feedbacks, as claimed in claim 21.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the updating the reliability of the weight comprises:

1) wherein when a feedback increases, the more the retrieval performance calculated from the feedback influences to the reliability;

2) wherein when the retrieval performance is not high, the retrieval performance calculated from a present feedback influence to the reliability update is in proportional to the reliability level; and

3) wherein when the present retrieval performance is higher than the previous retrieval performance, the reliability increases, and otherwise the reliability decreases, as claimed in claim 22.

#### *Response to Arguments*

14. Applicant's arguments filed on 04-March-2003 with respect to the cited references have been fully considered but they are not found to be persuasive:

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In response to applicants' arguments that Wactlar et al "does not teach or suggest at least a feature a method for multimedia retrieval based on a query", the arguments have been fully considered but are not found to be persuasive, because Wactlar et al does teach query based retrieval of multimedia objects (see column 12, lines 6-19.)

In response to applicants' arguments that Wactlar et al "does not teach or suggest updating the ... reliability of the weight by reflecting the retrieval performance evaluation and combinations thereof as recited in claim 1", the arguments have been fully considered but are not found to be persuasive, because, as explained in the detailed remarks in claim 1 above, the teachings of claim 1 are taught by a combination of the Wactlar et al and Vaithilingam et al inventions. In this case, as noted previously, the "updating of the weights" and "using weight of multimedia features and reliability of the weight" are taught by the secondary reference, Vaithilingam et al as explained in claim 1 above.

In response to the applicants' arguments that "metadescrptors do not teach or suggest modifying a 'weight' of multimedia through using reliability", and that "metadescrptors are updated based on the weights and therefore does not teach or suggest at least a feature of updating the present weight using the updated reliability", the arguments have been fully considered but are not found to be persuasive, because Vaithilingam et al does teach "updating the value of meta-descriptors by assigning new weights for features" (see column 9, lines 56-59.) In this case, "updating the present weight" is read on "assigning new weights for features".

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In response to applicants' arguments that Aggarwal et al "does not teach or suggest at least the feature of calculating retrieval performance using the one or more user feedbacks and combination thereof", the arguments have been fully considered but are not found to be persuasive, because Aggarwal et al teaches "calculating retrieval performance using the one or more user feedbacks" through "the similarity measures are adaptive quantities, which are adjusted with user's feedback. The measures could be different for different segments" (see column 5, lines 10-12.)

### *Conclusion*

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

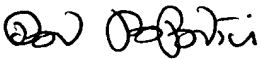
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16. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

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May 12, 2003

  
DOV POPOVICI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100